

AMENDMENTS TO THE CLAIMS

1. – 40. (Canceled)

41. (Previously Presented) A diagnostic reagent for the differential detection of a human endogenous retroviral sequence, said diagnostic reagent comprising one or more isolated polynucleotides according to Claim 57.

42. (Previously Presented) The diagnostic reagent according to Claim 41, wherein said polynucleotide further comprises a label for detection.

43. (Previously Presented) The diagnostic reagent according to Claim 41, wherein said polynucleotide is selected from the group consisting of nucleotides 3065-4390 of SEQ ID NO: 3, nucleotides 6965-9550 of SEQ ID NO: 3, and nucleotides 2502-2865 of SEQ ID NO: 3.

44. – 45. (Canceled)

46. (Currently Amended) A method for the differential detection of a human endogenous retroviral sequence, comprising:

(a) contacting a biological sample with at least one diagnostic reagent ~~comprising~~ according to Claim 41, and

(b) detecting a nucleotide sequence-diagnostic reagent interaction; wherein the detection of a nucleotide sequence-diagnostic reagent interaction indicates the presence of the human endogenous retroviral sequence.

47. (Previously Presented) A method for the differential detection of a human endogenous retroviral sequence, comprising:

(a) preparing a biological tissue or fluid,

(b) extracting a nucleic acid to be detected,

(c) contacting the nucleic acid with at least one diagnostic reagent according to Claim 41,

(d) detecting a nucleotide sequence-diagnostic reagent interaction, and

(e) comparing the nucleotide sequences obtained from said detecting with a polynucleotide selected from the group consisting of:

i. one of SEQ ID NO: 1, 2, and 3

ii. the sequence complementary to one of SEQ ID NO: 1, 2, and 3, and

iii. a sequence that is the reverse complement to one of SEQ ID NO: 1, 2, and

3;

wherein said comparing identifies an insertion, deletion or mutation between said sequences compared.

48. (Previously Presented) The method according to Claim 47, wherein said comparing is by a technique selected from the group consisting of sequencing, Southern blotting, restriction cleavage, and SSCP.

49. (Previously Presented) A method for the differential detection of a human endogenous retroviral sequence, comprising:

collecting messenger RNAs obtained from a control biological sample and from a sample collected from patient, and

analyzing qualitatively and/or quantitatively said mRNAs using a diagnostic reagent according to Claim 41 by a technique selected from the group consisting of *in situ* hybridization, by dot-blot, Northern blotting, RNase mapping and RT-PCR.

50. (Previously Presented) A recombinant cloning or expression vector comprising the polynucleotide according to Claim 57.

51. (Previously Presented) A method of making a diagnostic reagent comprising mixing the polynucleotide according to Claim 57 with a suitable medium.

52. – 56. (Canceled)

57. (Previously Presented) An isolated polynucleotide sequence selected from the group consisting of:

- a) the polynucleotide sequence of SEQ ID NO: 3;
- b) the complementary sequence to the sequence of a);
- c) the reverse complementary sequence to the sequence of a) or b);
- d) a fragment of a coding region of the sequence of a), wherein said fragment corresponds to a coding frame of at least 14 nucleotides; and
- e) the complementary sequence to the sequence of d).

58. (Previously Presented) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of SEQ ID NO: 1 or SEQ ID NO: 2.

59. (Previously Presented) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of a sequence encoding the C-terminal portion of enverin wherein said sequence begins at the codon at positions 8749 to 8751 of SEQ ID NO: 3 and contains at least 14 nucleotides.

60. (Previously Presented) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of a sequence encoding the C-terminal portion of enverin wherein said sequence begins at the codon at positions 8839 to 8841 of SEQ ID NO: 3 and contains at least 14 nucleotides.